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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/336,462	06/18/1999	ROLF STEIGER	ICH-286	7675

25230 7590 02/20/2003

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EXAMINER
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GRENDZYNSKI, MICHAEL E

ART UNIT	PAPER NUMBER
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1774

19

DATE MAILED: 02/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/336,462

Applicant(s)

STEIGER, ROLF

Examiner

Michael E. Grendzynski

Art Unit

1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3,5,8,9,11-19 and 21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,8,9,11-19 and 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Withdrawal of Finality*

1. In light of the arguments made in Paper No. 18, and in view of the new grounds of rejection below, the finality of Paper No. 17 is withdrawn and prosecution is hereby reopened.

### *Claim Rejections - 35 USC § 103*

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-3, 5, 8, 9, 11-19 and 21 are rejected under 35 U.S.C. 103(a) as being obvious over Brugger in view of Malhotra I (US 5589277) or Malhotra II (US 5683793). Applicant claims a recording sheet comprising a support and at least one ink-receiving layer containing (1) a binder; (2) a porous inorganic oxide comprising colloidal aluminum oxide, colloidal aluminum oxide/hydroxide, or pseudoboehmite; at least one element of the rare earth metal series with atomic numbers 57 to 71; and (4) an aliphatic hydroxycarboxylic acid with more than 2 carbon atoms. Brugger discloses a recording sheet for ink jet printing comprising a substrate and an ink-receiving layer. *See* Abstract. The ink-receiving layer comprises a binder such as polyvinyl alcohol (*see* col. 4, ll 14-33), a porous inorganic oxide in the form of an colloidal alumina (pseudo boehmite), and from 0.04 to 4.2 mole percent of one or more elements of the rare earth metal series of the periodic system of the elements with atomic numbers 57 to 71 relative to  $Al_2O_3$ . *See* col. 3, ll 30-49. While not limiting the additives that may be placed in its ink-receiving layer, Brugger does not specifically disclose the use of a hydroxycarboxylic acid such as lactic acid. *See* col. 4, ll 40-63. Malhotra references I and II teach that the addition of carboxylic acids such as lactic acid into an ink receptive layer improves drying time inks printed on the layer, as well as improves the optical density and haze values of images placed thereon. *See* Malhotra I at col. 10, ll 26-32; col. 18, l

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16; col. 33, ll 40-64 and col. 36, ll 20-37. *See* Malhotra II at col. 4, ll 10. It would have been obvious to one of ordinary skill in the art at the time of the invention to use a carboxylic acid such as lactic acid, to provide the ink-receiving layer with improved ink drying and optical density properties, as taught by Malhotra references I and II on col. 33, ll 40-64 and col. 36, ll 20-37, respectively.

With specific regard to claim 8, “even though product-by process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” *In re Thorpe*, 227 USPQ 964, 966. Once the Examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983). *See* MPEP §2113.

With specific regard to claim 13, Brugger discloses that its earth metal salt is lanthanum nitrate. *See* col. 9, ll 44-46.

With specific regard to claim 14, Brugger discloses that its layer may further comprise a cross linking agent. *See* col. 4, ll 40-47.

With specific regard to claims 15 and 21, Brugger discloses that its ink-receiving layer comprises a filler such as silica. *See* col. 5, ll 1-10.

With specific regard to claim 16, Brugger discloses that its ink-receiving layer comprises surfactants. *See* col. 5, ll 51-64.

With specific regard to claims 17 and 18, Brugger discloses the recording sheet may comprise several layers. *See* col. 6, ll 36-48.

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With specific regard to claim 19, Brugger discloses that the thickness of its ink-receiving layer comprises a thickness of 0.5 to 100  $\mu\text{m}$ . *See* col. 6, ll 32-34.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). *For applications filed on or after November 29, 1999*, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. *See* MPEP § 706.02(I)(1) and § 706.02(I)(2).

4. Claim 20 is rejected under 35 U.S.C. 103(a) as being obvious over Brugger in view of Malhotra I and II, as applied to claims 1-3, 5, 8, 9, 11-19 and 21, above, in view of either (1) Floegel (US 6284339) or Uemura (US 6153305), or (2) Kasahara. Brugger clearly contemplates coating its ink-receptive layer on both sides of the substrate. *See* col. 5, ll 17-18. This practice reduces the curling of the medium; consequently, meet applicant's definition of an anti-curl layer. *See* Floegel at col. 4, ll 22-26 and Uemura at col. 11, ll 46-48. In addition, the use of antistatic and anti-curl layers is well known in the art; consequently their use would be obvious. *See* Kasahara, col. 15, ll 60-64.


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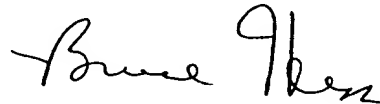
**Conclusion**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael E. Grendzynski whose telephone number is 703-305-0593. The examiner can normally be reached on weekdays, from 9:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 703-308-0449. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-5408 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2351.

  
Michael E. Grendzynski  
Assistant Examiner  
February 11, 2003



BRUCE H. HESS  
PRIMARY EXAMINER